

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (previously presented) A milking device comprising at least a teat receiving flexible sleeve, adapted to be positioned on/over a teat, wherein at least a first portion thereof comprises a thermoplastic vulcanisate (TPV) comprising a thermoplastic continuous phase and a cross-linked rubber discontinuous phase and exhibiting the following properties:

- a) a hardness between 25 shore A and 50 shore D;
- b) a Young's modulus between 0.1 MPa and 50 MPa;
- c) a tensile strength above 0.5 MPa; and
- d) a minimum elongation of 50% without breakage.

2. (cancelled)

3. (previously presented) The milking device as claimed in claim 1, wherein the cross-linked rubber discontinuous phase comprises a butadiene rubber; silicone; EPDM; or NBR optionally grafted with acrylates or anhydrides, or a combination of any or all of these.

4. (previously presented) The milking device as claimed in claim 1, wherein the cross-linked rubber is selected from the group consisting of nitrile rubber, styrene-butadiene rubber, butyl rubber, halo-butyl rubber, ethylene-propylene rubber, polyisoprene, polychloroprene, polybutene copolymers, and chlorosulfonated polyethylene.

5. (previously presented) The milking device as claimed in claim 1, wherein the thermoplastic continuous phase comprises a crystalline polyolefin selected from the group consisting of polyethylene, polypropylene, or copolymers, and mixtures thereof.

6. (currently amended) A milking device comprising at least a teat receiving flexible sleeve, adapted to be positioned on/over a teat, wherein at least a first portion thereof comprises a thermo-plastic elastomers (TPE) exhibiting the following properties:

a) a hardness between 25 shore A and 50 shore D;

b) a Young's modulus between 0.1 MPa and 50 MPa;

c) a tensile strength above 0.5 MPa; and

d) a minimum elongation of 50% without breakage,

wherein at least a further portion comprises a TPE, the further portion is different from that of the first portion by at least one of (i) type of TPE and (ii) stiffness/hardness,

wherein said TPE of said first portion and said TPE of said further portion comprise a two phase system with a first phase including a harder polymer providing mechanical strength and a second phase including a softer rubbery polymer.

7. (previously presented) The milking device as claimed in claim 6, wherein said first portion comprises a core material, and wherein said further portion is at least a partial surface coating on said core material.

8. (previously presented) The milking device as claimed in claim 7, wherein the core material has a  $\tan \delta < 0.20$ .

9. (currently amended) The milking device as claimed in claim 7, wherein the further portion is different from the first portion by the type of TPE, and the core material is an SBS or SEBS, and the surface coating is an EPDM based TPV or NBR.

10. (previously presented) The milking device as claimed in claim 6, wherein the TPE of said further portion is different from the TPE of said first portion in that the TPE of the first portion exhibits a higher stiffness/hardness than the TPE of said further portion.

11. (previously presented) The milking device as claimed in claim 10, wherein the TPE exhibiting a higher stiffness/hardness comprises a hard EPDM based TPV or a hard NBR based TPV, TPU, TPA or TEEE, and a softer part that is a soft EPDM based TPV or a soft NBR based TPV.

12. (previously presented) The milking device as claimed in claim 1, exhibiting a service temperature between -60 and +200°C.

13-16. (cancelled)

17. (previously presented) The milking device as claimed in claim 1, wherein the TPE is resistant to chlorine, ozone and to UV irradiation and thermal oxidation.

18. (previously presented) The milking device as claimed in claim 1, wherein the TPE exhibits a tear strength between 5 and 50 kN/m.

19. (previously presented) The milking device as claimed in claim 1, wherein the tensile strength of the TPE is 0.5-40 MPa.

20. (previously presented) The milking device as claimed in claim 1, wherein the elongation of the TPE is more than 200% before breakage.

21. (currently amended) A milking device comprising:  
a head portion (22);  
a sleeve (24), and  
a separate milk tube (26), connectable with the sleeve (24),

the sleeve (24) being a teat receiving flexible sleeve, adapted to be positioned on/over a teat, wherein at least a first portion thereof comprises a thermo-plastic elastomers (TPE) comprising a two phase system with a first phase including a harder polymer providing mechanical strength and a second phase including a softer rubbery polymer, the TPE exhibiting the following properties:

- a) a hardness between 25 shore A and 50 shore D;
- b) a Young's modulus between 0.1 MPa and 50 MPa;
- c) a tensile strength above 0.5 MPa; and
- d) a minimum elongation of 50% without breakage.

22. (previously presented) The milking device as claimed in claim 1, which is a teat cup liner, adapted to be positioned on/over a teat in a close fit, comprising a head

portion (22), a sleeve (24) and a milk tube (26) integrated in a unitary structure.

23-27. (cancelled)

28. (previously presented) The milking device as claimed in claim 5, wherein the polyolefin is selected from the group consisting of HDPE, LDPE, and LLDPE.

29. (previously presented) The milking device as claimed in claim 18, wherein the TPE exhibits a tear strength between 15-35 kN/m.

30. (previously presented) The milking device as claimed in claim 19, wherein the tensile strength of the TPE is 5-20 MPa.

31. (previously presented) The milking device as claimed in claim 20, wherein the elongation of the TPE is more than 300% before breakage.

32. (new) A milking device comprising at least a teat receiving flexible sleeve, adapted to be positioned on/over a teat, wherein at least a first portion thereof comprises a thermo-plastic elastomers (TPE) comprising a two phase system

with first phase including a harder polymer providing mechanical strength and a second phase including a softer rubbery polymer, the TPE exhibiting the following properties:

- a) a hardness between 25 shore A and 50 shore D;
- b) a Young's modulus between 0.1 MPa and 50 MPa;
- c) a tensile strength above 0.5 MPa; and
- d) a minimum elongation of 50% without breakage.